AMENDMENTS TO THE CLAIMS

1. (withdrawn) A method for material handling, comprising:
receiving input, with an engine, comprising up to a plurality of lots to be processed by a process machine;
after receiving input, determining, with the engine, which of the plurality of lots are remotely located from process machine; and
assigning, with the engine, at least one of the remotely located lots to a selected one of up to a plurality of stockers, each stocker capable of storing a plurality of lots, said assigning based on stocker state.

2. (withdrawn) The method of claim 1, wherein determining which of the lots are remotely located from the process machine includes deselecting those remotely located lots which are
assigned to a stocker which is proximally located to the process machine; or
in transit to a selected one of the process machine and a stocker which is proximally located to the process machine.

3. (withdrawn) The method of claim 1, wherein the process machine comprises at least a selected one of a plurality of machines which perform substantially the same process.

4. (withdrawn) The method of claim 1, further comprising:
providing a manual order queue for a process machine, said manual order queue to receive user input through a user interface.

5. (withdrawn) The method of claim 1, further comprising:
communicating at least one lot assignment to a material control system for physical movement of the lot.

6. (withdrawn) The method of claim 1, further comprising:
moving at least one remotely located lot to assigned stocker.

7. (withdrawn) The method of claim 1, wherein stocker state includes information on at least a selected one of an individual stocker's utilization, availability, storage capacity, and proximity to process machine.

8. (withdrawn) The method of claim 7 wherein stocker availability is based on at least a selected one of real-time and periodic stocker machine status information.

9. (withdrawn) The method of claim 7, wherein stocker state at least includes information on stocker availability, and assigning at least one of the remotely located lots to a selected one of up to a plurality of stockers includes
determining available stockers by deselecting stockers which are at least a selected one of off-line and nonfunctioning, from up to a plurality of stockers; and
assigning at least one of the remotely located lots to a selected one of the

available stockers.

10. (withdrawn) The method of claim 7, wherein stocker state at least includes information on stocker availability and proximity to process machine, and assigning at least one of the remotely located lots to a selected one of up to a plurality of stockers includes

determining available stockers by deselecting stockers which are at least a selected one of off-line and non-functioning from up to a plurality of stockers;

determining local available stockers by selecting available stockers which are proximally located to process machine; and

assigning at least one of the remotely located lots to a selected one of the local available stockers.

11. (withdrawn) The method of claim 7, wherein stocker state at least includes information on stocker availability, proximity to process machine, and utilization, and assigning at least one of the remotely located lots to a selected one of up to a plurality of stockers includes

determining available stockers by deselecting stockers which are at least a selected one of off-line and nonfunctioning from up to a plurality of stockers;

determining local available stockers by selecting available stockers which are proximally located to process machine;

determining valid local stockers by selecting local available stockers with a utilization which does not exceed a predetermined utilization limit; and

assigning at least one of the remotely located lots to a selected one of the valid local stockers.

12. (withdrawn) The method of claim 11, further comprising:

assigning at least one of a selected plurality of lots stored in a stocker with a utilization which exceeds a predetermined utilization limit, to a selected one of valid local stockers.

13. (withdrawn) The method of claim 11, wherein the stocker utilization is determined by dividing a selected one of a number of lots stored in the stocker, and a sum of a number of lots stored in the stocker and a number of lots assigned to the stocker, by the lot storage capacity of the stocker.

14. (withdrawn) The method of claim 11, wherein assignments of up to a plurality of remotely stored lots are substantially uniformly distributed among a plurality of the valid local stockers.

15. (withdrawn) The method of claim 11, further comprising:

iteratively assigning at least a selected one of a plurality of remotely located lots to a selected one of the valid local stockers, until substantially all of the remotely stored lots have been assigned.

16. (withdrawn) The method of claim 11, further comprising:

iteratively assigning at least a selected one of a plurality of remotely located lots to the least utilized of the valid local stockers, until substantially all of the remotely stored lots have been assigned; and

periodically reevaluating the utilization of the valid stockers.

17. (currently amended) A system, comprising:

~~a control system;~~

a user interface to receive an identification of a plurality of lots to be processed on a process machine;

a first stocker to store a first lot of the plurality of lots awaiting processing, the first stocker having a first closeness relative to the process machine;

a second stocker having a second closeness relative to the process machine;~~plurality of stockers, each adapted to store a discrete number of lots;~~ and

an engine, to generate staging instructions to move ~~a~~the first lot~~ of the plurality of lots awaiting processing~~ from ~~a~~the ~~remote~~first stocker to ~~a local~~ the second stocker based at least in part upon the first closeness and the second closeness.

18. (currently amended) The system of claim 17, wherein the engine further generates staging instructions based at least in part upon stocker state and wherein stocker state includes information on at least a selected one of a group consisting of an individual stocker's utilization, availability, and storage capacity~~, and proximity to a process machine, and further comprising a lot conveyor, to move the lot from the remote stocker to the local stocker according to the generated staging instructions~~.

19. (currently amended) The system of claim 17, further comprising:

a control system; and

a queuer, communicatively coupled to the control system, to validate a list of the plurality of lots received by the user interface, record the~~ lots~~ list in a database, and communicate the validity of the list and presence of the list in the database to the control system.

20. (original) The system of claim 19, wherein the control system is further capable of communicating to the user interface a validity of the list and presence of list in the database.

21. (original) The system of claim 17, wherein the user interface further comprises:

a graphical user interface through which the system may receive a list of lots to be processed by a particular process machine.

22. (currently amended) A machine-accessible medium comprising a plurality of instructions, which when executed

~~provide~~ receive ~~a manual order queue~~ input ~~for a process machine, manual order queue to receive input~~ over a first data connection, said input comprising a plurality of lots to be processed by ~~the~~ a process machine;

determine, upon receipt of said input, which of the plurality of lots are stored remotely ~~located~~ from the process machine; and assign at least one of the remotely ~~located~~ stored lots to a selected one of up to a plurality of stockers, each stocker capable of storing a plurality of lots, said assignment based at least in part upon stocker state.

23. (currently amended) The machine accessible medium of claim 22, wherein stocker state includes information on at least a selected one of a group consisting of an individual stocker's utilization, availability, storage capacity, and proximity to process machine.

24. (currently amended) The machine-accessible medium of claim 23, wherein stocker state at least includes information on stocker availability, further comprising instructions to

determine available stockers by deselecting stockers which are ~~at least a selected one of~~ either off-line ~~and~~ or nonfunctioning from the up to a plurality of stockers; and

assign at least one of the remotely ~~located~~ stored lots to a selected one of the available stockers.

25. (currently amended) The machine -accessible medium of claim 23, wherein stocker state at least includes information on stocker availability and proximity to process machine, further comprising instructions to

determine available stockers by deselecting stockers which are ~~at least a selected one of~~ off-line ~~and~~ or nonfunctioning from the up to a plurality of stockers;

determine local available stockers by selecting available stockers which are proximally located to the process machine; and

assign remotely ~~located~~ stored lots to local available stockers.

26. (currently amended) The machine accessible medium of claim 23, wherein stocker state at least includes information on stocker availability, proximity to process machine, and utilization, further comprising instructions to

determine available stockers by deselecting stockers which are ~~at least a selected one of~~ off-line ~~and~~ or nonfunctioning from the up to a plurality of stockers;

determine local available stockers by selecting available stockers which are proximally located to the process machine;

determine valid local stockers by selecting local available stockers with a utilization which does not exceed a predetermined utilization limit; and

assign at least one of the remotely ~~located~~ stored lots to a selected one of the valid local stockers.

27. (withdrawn) A method, comprising:

receiving input, with an engine, comprising an identification of a lot to be processed by a process machine, the lot being located at a remote stocker;

determining, with the engine, a local stocker to which to move the lot;

moving the lot from the remote stocker to the local stocker; and

moving the lot from the local stocker to the process machine after moving the lot from the remote stocker to the local stocker.

28. (withdrawn) The method of claim 27, wherein the local stocker to which to move the lot is determined based on at least one of a stocker's utilization, availability, storage capacity, and proximity to process machine.

29. (withdrawn) The method of claim 27, wherein determining a local stocker to which to move the lot comprises:

determining available stockers by deselecting stockers which are at least a selected one of off-line and nonfunctioning, from up to a plurality of stockers; and

determining local available stockers by selecting available stockers which are proximally located to the process machine.